

## State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3406 FAX (603) 271-7894



January 14, 2004 Letter of Deficiency DSP#04-005

Mr. Tom Dutton City of Keene Public Works Department 350 Marlboro Street Keene, NH 03431

RE: Goose Pond Dam #126.03, Keene

Dear Mr. Dutton:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 1, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

There is an outstanding letter of deficiency (LOD) dated April 26, 2002. The following is the status of the items as listed on the outstanding LOD:

- a. Remove the brush and small tree growth that was abundant on the crest, upstream embankment, downstream embankment, and within 10 feet of the overflow spillway both upstream and downstream. It was obvious that this had been conducted with some regrowth. It was indicated that the brush is cut on a yearly basis in the late fall by contract;
- b. Place large sized riprap (12 inches in size) on both the left and right side of the low-level outlet section in the areas where erosion of fill, added to the upstream embankment in the late 1970's, is occurring. The riprap will eliminate the erosion in this area to maintain the access to the low-level outlet during storm events. This has been conducted;
- c. Remove the debris in the downstream channel of the overflow spillway section. This had been conducted and as discussed is conducted on a regular basis;
- d. Continue to monitor the seepage and maintain the weir at the base of the low-level outlet and submit the results to our office. This is conducted on a monthly basis and documented readings are supplied to our office on a yearly basis. The seepage on this date was consistent with previously recorded readings:
- 2. Large rocks had been placed at the entrance to the concrete overflow spillway along the right side of the dam;
- 3 Brush and small tree growth near the low-level outlet at the downstream toe appeared to have not been cut during the last annual cutting; and
- 4. The brush and small tree growth in the downstream left groin appeared to be more overgrown than the majority of the dam.

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DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

## **February 28, 2004:**

1. Update and conduct a test of the EAP and submit the results to our office;

## April 30, 2004:

2. Remove the large rocks at the entrance to the concrete overflow spillway along the right side of the dam;

## October 30, 2004:

- 3. Remove the brush and small tree growth near the low-level outlet at the downstream toe; and
- 4. Remove the brush and small tree growth in the downstream left groin and within 10 feet of the groin/abutment.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. Please call or write to our office if the repairs are completed before the aforementioned schedule. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

Dale F. Guinn, P.E.
Dam Safety Engineer

Attachments DB8, DB13

cc: Gretchen Rule Bethann McCarthy, P.E.

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